

FILEID**CREATE

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CCCCCCCC	RRRRRRRR	EEEEEEEEE	AAAAAA	TTTTTTTTT	EEEEEEEEE
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CC	RR	RR	AA	TT	EE
CC	RR	RR	AA	TT	EE
CC	RR	RR	AA	TT	EE
CC	RRRRRRRR	EEEEEEE	AA	TT	EEEEEEE
CC	RRRRRRRR	EEEEEEE	AA	TT	EEEEEEE
CC	RR	RR	AAAAAAA	TT	EE
CC	RR	RR	AAAAAAA	TT	EE
CC	RR	RR	AA	TT	EE
CC	RR	RR	AA	TT	EE
CCCCCCCC	RR	RR	AAAAAAA	TT	EEEEEEE
CCCCCCCC	RR	RR	AA	TT	EEEEEEE

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LL	IIIIII	SSSSSSSS
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LLLLLLLL	IIIIII	SSSSSSSS
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0001 0
0002 0 MODULE CREATE (LANGUAGE (BLISS32) .
0003 0 IDENT = 'V04-000'
0004 0) =
0005 1 BEGIN
0006 1 *****
0007 1 *
0008 1 *
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0026 1 *
0027 1 *
0028 1 *****
0029 1
0030 1 ++
0031 1
0032 1 FACILITY: MTAACP
0033 1
0034 1 ABSTRACT:
0035 1
0036 1 This module executes the create function
0037 1
0038 1 ENVIRONMENT:
0039 1
0040 1 Starlet operating system, including privileged system services
0041 1 and internal exec routines.
0042 1
0043 1 --
0044 1
0045 1
0046 1
0047 1 AUTHOR: D. H. GILLESPIE, CREATION DATE: 3-JUN-77
0048 1
0049 1 MODIFIED BY:
0050 1
0051 1 V03-002 MMD0153 Meg Dumont, 26-Apr-1983 9:08
0052 1 Change reference to 80 to the symbol ANSI LBLSZ. Add HDR4
0053 1 processing which includes: 1) changing the number of HDRs
0054 1 to look for when positioning to write a file. 2) Add the
0055 1 writing of HDR4 to the routine WRITE_HEADERS.
0056 1
0057 1 V03-001 MMD0001 Meg Dumont, 5-Nov-1982 16:22

58 0058 1 Allow the setting of user handled EOT on a file create.
59 0059 1 Add routine to set user handled EOT.
60 0060 1
61 0061 1 V02-012 DMW0019 David Michael Walp 11-Nov-1980
62 0062 1 New BLISS compiler, FUNCTION declaration changed from
63 0063 1 BBLOCK to BLOCK. Old compiler use to give a longword
64 0064 1 with a declaration of "BBLOCK [1]".
65 0065 1
66 0066 1 V02-011 MCN0018 Maria del C. Nasr 26-Aug-1980
67 0067 1 Implement bug fix described in MCN0017
68 0068 1
69 0069 1 V02-010 MCN0017 Maria del C. Nasr 29-Jul-1980
70 0070 1 Check if EOT was sensed after writing the header labels of the
71 0071 1 file being created, instead of waiting for virtual IO to lock
72 0072 1 the error. Also, add a kernel mode routine which will update
73 0073 1 the partfile flag in the VCB, to account for cancel IO. This
74 0074 1 fixes a problem in which creating empty files at the end of a
75 0075 1 tape will cause a runaway tape situation.
76 0076 1
77 0077 1 V02-009 REFORMAT Maria del C. Nasr 30-Jun-1980
78 0078 1
79 0079 1 V02-008 SPR27361 Maria del C. Nasr 10-Jun-1980
80 0080 1 The file should be accessed after the tape is positioned
81 0081 1 right before the data starts, to make sure all IO has been
82 0082 1 completed. Also, eliminate user labels code.
83 0083 1
84 0084 1 A0007 MCN0011 Maria del C. Nasr 04-Feb-1980 9:05
85 0085 1 Clear logical end of volume flag after spacing tape mark
86 0086 1 back to fix bug.
87 0087 1
88 0088 1 A0006 MCN0003 Maria del C. Nasr 28-Sep-79 10:27
89 0089 1 Add HDR3 processing
90 0090 1
91 0091 1 A0005 MCN0001 Maria del C. Nasr 21-Sep-79 10:15
92 0092 1 Added argument to CHECK_FILE_ACC call to fix bug in
93 0093 1 "create if" function.
94 0094 1
95 0095 1
96 0096 1 !**
97 0097 1
98 0098 1 LIBRARY 'SYSSLIBRARY:LIB.L32';
99 0099 1
100 0100 1 REQUIRE 'SRCS:MTADEF.B32';
101 0484 1
102 0485 1 FORWARD ROUTINE
103 0486 1 MTA CREATE : NOPRES NOVALUE, ! main routine to create a file
104 0487 1 ACCESS NEW FILE : COMMON_CALL NOVALUE. ! access a newly created file
105 0488 1 INIT NEW FILE : COMMON_CALL NOVALUE. ! initialize new file
106 0489 1 SET USER EOT : COMMON_CALL NOVALUE, ! set user wot handling for file
107 0490 1 WRITE HEADERS : NOVALUE LSWRITE HEADER ! write hdr1, hdr2, and hdr3,hdr4
108 0491 1 UPD_PARTFILE : COMMON_CALL NOVALUE; ! update partfile flag in the VCB
109 0492 1
110 0493 1 EXTERNAL ROUTINE
111 0494 1 ACCESS FILE : COMMON_CALL, ! access file
112 0495 1 CHECK_ACCESS : COMMON_CALL, ! check access to volume
113 0496 1 CHECK_FILE_ACC : COMMON_CALL, ! check access to file
114 0497 1 CLOSE_FILE : LSCLOSE_FILE, ! close file

115	0498	1	FORMAT_FID	: COMMON_CALL,	! format file identifier
116	0499	1	FORMAT_HDRS	: COMMON_CALL,	format headers
117	0500	1	GET_FIB	: COMMON_CALL,	get copy of user's fib
118	0501	1	GET_START_HDR	: LSGET_START_HDR,	get header to start with
119	0502	1	MOUNT_VOL	: COMMON_CALL,	mount a volume
120	0503	1	NEXT_VOL_WRITE	: LSNEXT_VOL_WRIT,	get next volume for write
121	0504	1	POSITION_TO_END	: COMMON_CALL,	position to end of vol set
122	0505	1	READ_HDR	: COMMON_CALL,	read header
123	0506	1	SPACE	: COMMON_CALL,	space given number of blocks
124	0507	1	SPACE_TM	: COMMON_CALL,	space given number of tape marks
125	0508	1	START_VIO	: COMMON_CALL,	start virtual io
126	0509	1	SYSSFAO	: ADDRESSING_MODE (ABSOLUTE),	! format ascii output
127	0510	1	UPDVCB LEOV	: COMMON_CALL,	to clear logical end of volume bit
128	0511	1	WRITE_BLOCK	: COMMON_CALL,	write tape block
129	0512	1	WRITE_TM	: LSWRITE_TM;	! write tape mark
130	0513	1			
131	0514	1	EXTERNAL		
132	0515	1	CURRENT_WCB	: REF BBLOCK,	! address of current window control block
133	0516	1	IO_PACKET	: REF BBLOCK,	! address of io request packet
134	0517	1	IO_STATUS,		! IO status returned
135	0518	1	HDR1	: REF BBLOCK,	! address of HDR1(EOF1) label
136	0519	1	HDR2	: REF BBLOCK,	! address of HDR2(EOF2) label
137	0520	1	HDR3	: REF BBLOCK,	! address of HDR3 label(EOF3)
138	0521	1	HDR4	: REF BBLOCK,	! address of HDR4 label(EOF4)
139	0522	1	USER_STATUS	: VECTOR;	! status to return the user
140	0523	1			

142 0524 1 GLOBAL ROUTINE MTA_CREATE : NOPRES NOVALUE =
143 0525 1
144 0526 1 ++
145 0527 1
146 0528 1 FUNCTIONAL DESCRIPTION:
147 0529 1 This is the main processing routine for MTAACP create function
148 0530 1
149 0531 1 CALLING SEQUENCE:
150 0532 1 MTA_CREATE()
151 0533 1
152 0534 1 INPUT PARAMETERS:
153 0535 1 none
154 0536 1
155 0537 1 IMPLICIT INPUTS:
156 0538 1 HDR1 - address hdr1(eof1) label
157 0539 1 HDR2 - address hdr2(eof2) label
158 0540 1 HDR3 - address hdr3(eof3) label
159 0541 1 HDR4 - address hdr4(eof4) label
160 0542 1 IO_PACKET - address of current io request packet
161 0543 1 CURRENT_VCB - address of current vcb
162 0544 1
163 0545 1 OUTPUT PARAMETERS:
164 0546 1 none
165 0547 1
166 0548 1 IMPLICIT OUTPUTS:
167 0549 1 The header label set is written and the access to the file made if requested
168 0550 1
169 0551 1 ROUTINE VALUE:
170 0552 1 none
171 0553 1
172 0554 1 SIDE EFFECTS:
173 0555 1 none
174 0556 1
175 0557 1 USER ERRORS:
176 0558 1 SSS_BADPARAM - bad input parameters to create or must ask to write file
177 0559 1 SSS_FILALRACC - only one file at a time open on magnetic tape
178 0560 1 SSS_FILENOTEXP - the file about to be overlayed is not expired
179 0561 1 SSS_NOPRIV - the user does not have necessary privileges
180 0562 1 --
181 0563 1 BEGIN
182 0564 2
183 0565 2
184 0566 2 EXTERNAL REGISTER
185 0567 2 COMMON_REG;
186 0568 2
187 0569 2 LOCAL
188 0570 2 INC SEQ_NUM. : indicator for init_new_file routine
189 0571 2 PACKET : REF BBLOCK. : address of current io request packet
190 0572 2
191 0573 2 ! address of buffer descriptors
192 0574 2
193 0575 2 ABD : REF BBLOCKVECTOR [, ABD\$C_LENGTH],
194 0576 2 FIB : REF BBLOCK. : address of copy of user's fib
195 0577 2 FUNCTION : BLOCK [1]; : io function
196 0578 2
197 0579 2 ! setup pointers to interesting structures
198 0580 2

```
199 0581 2 PACKET = .10_PACKET;
200 0582 222 ! address of buffer descriptors
201 0583 222
202 0584 222
203 0585 222 ABD = .BBLOCK[.PACKET[IRPSL_SVAPTE], AIBSL_DESCRIPTOR];
204 0586 222 FIB = GET_FIB(.ABD); ! get copy of user's file information block
205 0587 222
206 0588 222
207 0589 222
208 0590 222
209 0591 222
210 0592 222
211 0593 222
212 0594 222
213 0595 232 IF .FIB[FIB$V_TRUNC] OR .FUNCTION[IOSV_DELETE]
214 0596 322 OR ( NOT .FUNCTION[IOSV_CREATE])
215 0597 322 AND
216 0598 322 (.FIB[FIB$V_EXTEND] OR .PACKET[IRPSW_BCNT] GTRU ABD$C_ATTRIB
217 0599 322 OR .FUNCTION[IOSV_ACCESS])
218 0600 222 OR NOT .FIB[FIB$V_WRITE]
219 0601 222 AND
220 0602 222 .FUNCTION[IOSV_ACCESS]
221 0603 222
222 0604 222 THEN
223 0605 222 ERR_EXIT(SSS_BADPARAM);
224 0606 222
225 0607 222
226 0608 222
227 0609 222
228 0610 222
229 0611 222
230 0612 222
231 0613 222
232 0614 222
233 0615 222
234 0616 222
235 0617 222
236 0618 222
237 0619 222
238 0620 222
239 0621 222
240 0622 222
241 0623 322
242 0624 322 ! if there is a partial file then it is closed. if the user wants to
243 0625 322 access a partial file, the access function io must be used
244 0626 322
245 0627 322
246 0628 322
247 0629 322
248 0630 322
249 0631 322
250 0632 322
251 0633 322
252 0634 322
253 0635 322
254 0636 322
255 0637 322 IF .PACKET[IRPSV_FCODE] EQL IOS_ACCESS ! if create if not found
```

```
256      0638 3      OR
257      0639 4      NOT (.FIB[FIB$V_REWIND]
258      0640 4      OR
259      0641 4      .FIB[FIB$V_CURPOS])
260      0642 3      THEN POSITION_TO_END()
261      0643 3      ELSE BEGIN
262      0644 3      BEGIN
263      0645 4      IF .FIB[FIB$V_REWIND]
264      0646 4      THEN BEGIN
265      0647 4      MOUNT_VOL(1, $FIELDMASK(MOUSV_REWIND) + $FIELDMASK(MOUSV_LBLCHECK));
266      0648 4      IF NOT READ_HDR()
267      0649 5      THEN ERR_EXIT(SSS_TAPEPOSLOST);
268      0650 5
269      0651 5
270      0652 5
271      0653 5
272      0654 5
273      0655 5
274      0656 5
275      0657 4      END
276      0658 4      ELSE
277      0659 4      ! create function with positioning indicators
278      0660 4      GET_START_HDR();
279      0661 4
280      0662 4
281      0663 3
282      0664 3
283      0665 3
284      0666 3
285      0667 3
286      0668 3      ! check expiration on overlayed files and position tape
287      0669 3      IF NOT .CURRENT_VCB[VCB$V_LOGICEOVS]
288      0670 4      THEN BEGIN
289      0671 4      INC SEQ_NUM = 0; ! overlaying file if not at end of volume set
290      0672 4      CHECK_FILE_ACC(0); ! do not increment file number
291      0673 4      ! can file be overlayed? (0)=mta_create
292      0674 4
293      0675 4
294      0676 4
295      0677 4      ! position to where file is to be written
296      0678 4
297      0679 4
298      0680 5      IF .CURRENT_VCB[VCB$B_TM] EQL 0
299      0681 4      AND
300      0682 5      (.CURRENT_VCB[VCB$V_STARFILE])
301      0683 4      THEN IF .CURRENT_VCB[VCB$B_LBLCNT] GTR 3
302      0684 4      THEN SPACE(-4) ! hdr1, hdr2, hdr3, hdr4 (or user label)
303      0685 4      ELSE SPACE(-3) ! hdr1, hdr2, and hdr3 lbls
304      0686 4
305      0687 4      ELSE SPACE(-2) ! not VMS file, space hdr1 and hdr2
306      0688 4
307      0689 4      ELSE BEGIN
308      0690 5      SPACE_TM(-1); ! backspace tm
309      0691 5
310      0692 5
311      0693 5      IF .HDR2[HD2$L_HD2LID] EQL 'HDR2' ! check if hdr2 found
312      0694 5
```

```
313      0695 5      SPACE(-2)          ! backspace hdr1 and hdr2
314      0696 5      ELSE SPACE(-1);    ! no hdr2, backspace hdr1 only
315      0697 5
316      0698 5
317      0699 4      END;
318      0700 4
319      0701 4      END
320      0702 3      ELSE BEGIN
321      0703 4          SPACE TM(-1);    ! logical end indicated by tape mark
322      0704 4          KERNEC CALL(UPDVCB_LEOV, 0); ! not at end of vol anymore
323      0705 4          INC SEQ_NUM = 1;    ! increment file number
324      0706 4          END;
325      0707 3
326      0708 3
327      0709 3      ! initialize new file and write headers
328      0710 3
329      0711 3      FORMAT_HDRS();
330      0712 3      KERNEL_CALL(INIT_NEW_FILE, .INC_SEQ_NUM);
331      0713 3      WRITE_READERS(); ! write hdr1, hdr2, hdr3 and hdr4
332      0714 3
333      0715 3      ! return fid to user in fib
334      0716 3
335      0717 3      FORMAT_FID(FIB[FIB$W_FID_NUM]);
336      0718 3      FIB[FIB$W_FID_RVN] = .CURRENT_VCB[VCB$B_CUR_RVN];
337      0719 3
338      0720 3      ! now if newly created file should be accessed do so
339      0721 3
340      0722 3
341      0723 3      IF .FUNCTION[IOSV_ACCESS]
342      0724 3      THEN
343      0725 3          ACCESS_NEW_FILE(.FIB, .PACKET, .ABD);
344      0726 3
345      0727 2      END;
346      0728 2
347      0729 1      END; ! end of routine
```

```
.TITLE CREATE
.IDENT \V04-000\

.EXTRN ACCESS_FILE, CHECK_ACCESS
.EXTRN CHECK_FILE_ACC, CLOSE_FILE
.EXTRN FORMAT_FID, FORMAT_HDRS
.EXTRN GET_FIB, GET_START_HDR
.EXTRN MOUNT_VOL, NEXT_VOL_WRITE
.EXTRN POSITION_TO_END
.EXTRN READ_HDR, SPACE
.EXTRN SPACE_TM, START_VIO
.EXTRN SYSSFAO, UPDVCB_LEOV
.EXTRN WRITE_BLOCK, WRITE_TM
.EXTRN CURRENT_WCB, IO_PACKET
.EXTRN IO_STATUS, HDR1
.EXTRN HDR2, HDR3, HDR4
.EXTRN USER_STATUS, SYSSCMKRNL

.PSECT $CODE$,NOWRT,2
```


		7E	04	CE 000BC	MNEGL	#4 -(SP)	0685
		7E	20	11 000BF	BRB	15\$ -(SP)	0686
		7E	03	CE 000C1	12\$:	MNEGL	0688
		7E	1B	11 000C4	BRB	15\$ -(SP)	0689
		7E	02	CE 000C6	13\$:	MNEGL	0691
		7E	16	11 000C9	BRB	15\$ -(SP)	0693
	0000G	7E	01	CE 000CB	14\$:	MNEGL	0697
32524448	CF	8F	01	FB 000CE	CALLS	#1, SPACE TM	0698
			DF	D1 000D3	CMPL	ADR2, #844252232	0704
			E8	13 000DC	BEQL	13\$	0705
	0000G	7E	01	CE 000DE	15\$:	MNEGL	0706
	CF		01	FB 000E1	CALLS	#1, SPACE	0711
	0000G	7E	1B	11 000E6	BRB	17\$	0712
	CF		01	CE 000E8	16\$:	MNEGL	0713
	0000G	7E	01	FB 000EB	CALLS	#1, SPACE_TM	0717
			01	7D 000F0	MOVQ	#1, -(SP)	0718
			5E	DD 000F3	PUSHL	SP	0723
	00000000G	9F	0000G	CF 9F 000F5	PUSHAB	UPDVCB LEOV	0725
		54	04	FB 000F9	CALLS	#4, #SYS\$CMKRL	0729
	0000G	CF	01	DD 00100	MOVL	#1, INC SEQ_NUM	
			00	FB 00103	17\$:	CALLS	
			54	DD 00108	PUSHL	#0, FORMAT_ADRS	
			01	DD 0010A	PUSHL	INC_SEQ_NUM	
			SE	DD 0010C	PUSHL	#1	
	00000000G	9F	0000V	CF 9F 0010E	PUSHAB	SP	
			04	FB 00112	CALLS	INIT_NEW_FILE	
			0000V	30 00119	BSBW	#4, #SYS\$CMKRL	
			04	A2 9F 0011C	PUSHAB	WRITE_HEADERS	
	0000G	CF	01	FB 0011F	CALLS	4(FIB)	
09	08	A2	2F	AB 9B 00124	MOVZBW	#1, FORMAT_FID	
		55	06	E1 00129	BBC	47(CURRENT_VCB), 8(FIB)	
	0000V	CF	004C	8F BB 0012D	PUSHR	#6, FUNCTION, 18\$	
			03	FB 00131	CALLS	#^M<R2,R3,R6>	
			04	00136	18\$:	RET	

: Routine Size: 311 bytes. Routine Base: \$CODE\$ + 0000

: 348 0730 1

```
350 0731 1 GLOBAL ROUTINE ACCESS_NEW_FILE (FIB, PACKET, ABD) : COMMON_CALL NOVALUE =
351 0732 1
352 0733 1 ++
353 0734 1
354 0735 1 FUNCTIONAL DESCRIPTION:
355 0736 1 this routine accesses a newly created file
356 0737 1
357 0738 1 CALLING SEQUENCE:
358 0739 1 access_new_file(arg1,arg2,arg3)
359 0740 1
360 0741 1 INPUT PARAMETERS:
361 0742 1 arg1 - address of copy of user file identification block
362 0743 1 arg2 - address of current io request packet
363 0744 1 arg3 - address of buffer descriptor vectors
364 0745 1
365 0746 1 IMPLICIT INPUTS:
366 0747 1 none
367 0748 1
368 0749 1 OUTPUT PARAMETERS:
369 0750 1 none
370 0751 1
371 0752 1 IMPLICIT OUTPUTS:
372 0753 1 Changes made to system data base to allow virtual fo.
373 0754 1 Tape mark is written.
374 0755 1
375 0756 1 ROUTINE VALUE:
376 0757 1 none
377 0758 1
378 0759 1 SIDE EFFECTS:
379 0760 1 none
380 0761 1
381 0762 1 --+
382 0763 1
383 0764 2 BEGIN
384 0765 2
385 0766 2 EXTERNAL REGISTER
386 0767 2 COMMON_REG;
387 0768 2
388 0769 2
389 0770 2 EXTERNAL
390 0771 2 USER_STATUS : VECTOR; ! status to return to user
391 0772 2
392 0773 2 MAP
393 0774 2 FIB : REF BBLOCK; ! file information block
394 0775 2 PACKET : REF BBLOCK; ! address of io request block
395 0776 2
396 0777 2 ! Write tape mark, create window, setup data base connections, complete io,
397 0778 2 ! and startup virtual io
398 0779 2
399 0780 2 WRITE_TM();
400 0781 2
401 0782 2 ! If the USEREOT flag is set in the FIB block of the I/O then as long
402 0783 2 ! as this file is accessed allow user eot handling
403 0784 2
404 0785 2 KERNEL_CALL(SET_USER_EOT, .FIB);
405 0786 2
406 0787 2
```

```

407 0788 2   ! If EOT is sensed, request a next volume, and clear the partial file flag
408 0789 2   ! since the end of volume labels will be written. If user handling of EOT
409 0790 2   ! is enabled then inform user of the condition.
410 0791 2
411 0792 2   IF NOT .CURRENT_VCB[VCBSV_ENUSEREOT]
412 0793 2   THEN
413 0794 2   BEGIN
414 0795 3
415 0796 3   IF .IO_STATUS EQL SSS_ENDOFTAPE
416 0797 3   THEN
417 0798 4   BEGIN
418 0799 4   KERNEL_CALL(UPD_PARTFILE, 0);
419 0800 4   NEXT_VOL_WRITE();
420 0801 4   END;
421 0802 2
422 0803 2
423 0804 2   ELSE
424 0805 2   USER_STATUS[0] = .IO_STATUS;           ! return status to user
425 0806 2   ! I/O's will be blocked
426 0807 2   ! and completed in error
427 0808 2   ! by the driver
428 0809 2
429 0810 2   KERNEL_CALL(ACCESS_FILE, .FIB[FIBSL_ACCTL], .PACKET[IRPSL_PID], 0, 1, .ABD);
430 0811 1   KERNEL_CALL(START_VIO);           ! end of routine

```

			07FC 00000	.ENTRY	ACCESS_NEW_FILE, Save R2,R3,R4,R5,R6,R7,R8,-; 0731
			04 0000G 30 00002	BSBW	R9,R10
			04 AC DD 00005	PUSHL	WRITE_TM
			01 DD 00008	PUSHL	FIB
			SE DD 0000A	PUSHL	#1
			04 FB 00010	PUSHAB	SP
20	00000000G 9F	2D AB	0000V 04 E0 00017	CALLS	SET_USER_EOT
	00000878 8F	0000G CF	0000G CF D1 0001C	BBS	#4, #NSYS\$CMKRLN
			1C 12 00025	CMPL	#1, 45(CURRENT VCB), 1\$
		7E	01 7D 00027	BNEQ	IO_STATUS, #2168
			5E DD 0002A	MOVA	2\$
			0000V CF 9F 0002C	PUSHL	#1, -(SP)
	00000000G 9F	0000G 04 FB	0000G 04 F8 00030	PUSHAB	SP
			0000G 30 00037	CALLS	UPD_PARTFILE
			07 11 0003A	BSBW	#4, #NSYS\$CMKRLN
	0000G CF	0000G 0C AC	0003C 1\$:	NEXT_VOL_WRITE	NEXT_VOL_WRITE
			00043 2\$:	BRB	2\$
			01 DD 00046	MOVL	IO_STATUS, USER_STATUS
			7E D4 00048	PUSHL	ABD
50	08 0C 04	0004A A0 BC	0004E 00051	CLRL	#1
			05 DD 00054	MOVL	-(SP)
			SE DD 00056	PUSHL	PACKET, R0
	0000G 9F	00058 08 FB	0005C	PUSHL	12(R0)
			0005C	PUSHL	#5
			00058	PUSHL	SP
			0005C	PUSHAB	ACCESS_FILE
			0005C	CALLS	#8, #NSYS\$CMKRLN

CREATE
V04-000

6 5
16-Sep-1984 02:12:45 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:46:37 [MTAACP.SRC]CREATE.B32;1

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(3)

DA1
V04

00000000G 9F 0000G 7E D4 00063
0000G 5E DD 00065
03 CF 9F 00067
04 FB 0006B
0000G 03 00072

CLRL -(SP)
PUSHL SP
PUSHAB START VIO
CALLS #3, @SYSSCMKRL
RET

: 0810

: 0811

: Routine Size: 115 bytes. Routine Base: \$CODES + 0137

: 431 0812 1

```

: 433 0813 1 GLOBAL ROUTINE SET_USER_EOT(FIB) : COMMON_CALL NOVALUE =
: 434 0814 1 ++
: 435 0815 1
: 436 0816 1 FUNCTIONAL DESCRIPTION:
: 437 0817 1
: 438 0818 1 This routine sets the Mode of the to user enabled EOT processing
: 439 0819 1 when the FIB$C_USEREOT bit is set in the FIB$W_CNTRLFUNC
: 440 0820 1
: 441 0821 1 CALLING SEQUENCE:
: 442 0822 1 set_user_eot(arg1)
: 443 0823 1
: 444 0824 1 INPUT PARAMETERS:
: 445 0825 1 Arg1 - address of copy of user file identification block
: 446 0826 1
: 447 0827 1 IMPLICIT INPUTS:
: 448 0828 1 none
: 449 0829 1
: 450 0830 1 OUTPUT PARAMETERS:
: 451 0831 1
: 452 0832 1 none
: 453 0833 1
: 454 0834 1 IMPLICIT OUTPUTS:
: 455 0835 1 VCB$W_MODE may be modified
: 456 0836 1
: 457 0837 1 ROUTINE VALUE:
: 458 0838 1 none
: 459 0839 1
: 460 0840 1 SIDE EFFECTS:
: 461 0841 1 none
: 462 0842 1
: 463 0843 1 -- BEGIN
: 464 0844 2 EXTERNAL REGISTER
: 465 0845 2 COMMON_REG;
: 466 0846 2
: 467 0847 2
: 468 0848 2 MAP
: 469 0849 2 FIB : REF BBLOCK; ! File information block
: 470 0850 2
: 471 0851 2 IF .FIB[FIB$W_CNTRLFUNC] EQL FIB$C_USEREOT
: 472 0852 2 THEN
: 473 0853 2 CURRENT_VCB[VCB$V_ENUSEREOT] = 1
: 474 0854 1 END;

```

50	04	0000	00000	.ENTRY	SET_USER_EOT. Save nothing	0813
OF	16	AC D0	00002	MOVL	FIB, R0	0851
		A0 B1	00006	CMPW	22(R0), #15	
		04 12	0000A	BNEQ	1\$	
2D	AB	02 88	0000C	BISB2	#2, 45(CURRENT_VCB)	0853
		04	00010 1\$:	RET		0854

: Routine Size: 17 bytes, Routine Base: \$CODE\$ + 01AA

CREATE
V04-000

: 475 0855 1

16-Sep-1984 02:12:45 VAX-11 Bliss-32 V4.0-742
14-Sep-1984 12:46:37 [MTAACP.SRC]CREATE.B32;1

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DA1
VO4

011
52
55

```
477 0856 1 GLOBAL ROUTINE WRITE_HEADERS : L$WRITE_HEADER NOVALUE =
478 0857 1
479 0858 1 ++
480 0859 1
481 0860 1 FUNCTIONAL DESCRIPTION:
482 0861 1 this routine inserts the file section and sequence number into hdr1,
483 0862 1 inserts the header label identifiers, zeroes the block count, and
484 0863 1 writes hdr1, hdr2, hdr3, and hdr4.
485 0864 1
486 0865 1 CALLING SEQUENCE:
487 0866 1     write_headers()
488 0867 1
489 0868 1 INPUT PARAMETERS:
490 0869 1     none
491 0870 1
492 0871 1 IMPLICIT INPUTS:
493 0872 1     hdr1, hdr2, hdr3, and hdr4 partially formatted
494 0873 1
495 0874 1 OUTPUT PARAMETERS:
496 0875 1
497 0876 1     none
498 0877 1
499 0878 1 IMPLICIT OUTPUTS:
500 0879 1     hdr1, hdr2, hdr3 and hdr4 written
501 0880 1
502 0881 1 ROUTINE VALUE:
503 0882 1     none
504 0883 1
505 0884 1 SIDE EFFECTS:
506 0885 1     none
507 0886 1
508 0887 1 --+
509 0888 1
510 0889 2 BEGIN
511 0890 2
512 0891 2 EXTERNAL REGISTER
513 0892 2     COMMON_REG;
514 0893 2
515 0894 2 LOCAL
516 0895 2
517 0896 2     | descriptor for file section and sequence number
518 0897 2
519 0898 2     DESCRIPTOR : VECTOR [2];
520 0899 2
521 0900 2     | store file section and sequence number
522 0901 2
523 0902 2     DESCRIPTOR[0] = HD1$S_FILESECNO + HD1$S_FILESEQNO;
524 0903 2     DESCRIPTOR[1] = HDR1[HD1$T_FILESECNO];
525 0904 2     SYSSFAO(DESCRIPTOR('!Z$W!4ZW'),
526 0905 2         0
527 0906 2         DESCRIPTOR,
528 0907 2         .CURRENT_VCB[VCBSW_CUR_SEQ]
529 0908 2         .CURRENT_VCB[VCBSW_CUR_NUM]);
530 0909 2
531 0910 2     | zero block count
532 0911 2
533 0912 2     CHSFILL('0', HD1$S_BLOCKCNT, HDR1[HD1$T_BLOCKCNT]);
```

```

534 0913 2
535 0914 2
536 0915 2
537 0916 2
538 0917 2
539 0918 2
540 0919 2
541 0920 2
542 0921 2
543 0922 2
544 0923 2
545 0924 2
546 0925 2
547 0926 2
548 0927 2
549 0928 2
550 0929 2
551 0930 2
552 0931 2
553 0932 2
554 0933 2
555 0934 2
556 0935 2
557 0936 2
558 0937 1

; inserts header label identifiers
; HDR1[HD1$L_HD1$ID] = 'HDR1';
; HDR2[HD2$L_HD2$ID] = 'HDR2';
; HDR3[HD3$L_HD3$ID] = 'HDR3';
; HDR4[HD4$L_HD4$ID] = 'HDR4';

; now write headers
; WRITE_BLOCK(.HDR1, ANSI_LBLSZ);
; WRITE_BLOCK(.HDR2, ANSI_LBLSZ);

; write hdr3 and hdr4 only if mount switch allows it

IF NOT .CURRENT_VCB[VCBSV_NOHDR3] AND .CURRENT_VCB[VCBSB_LBLCNT] GTR 2
THEN
  BEGIN
    WRITE_BLOCK(.HDR3, ANSI_LBLSZ);
    IF .CURRENT_VCB[VCBSB_LBLCNT] GTR 3
      THEN WRITE_BLOCK(.HDR4, ANSI_LBLSZ);
  END;
END;                                     ! end of routine

```

```

57 5A 34 21 57 5A 34 21 001BB P.AAB: .ASCII  \!4ZW!4ZW\
001C3 .BLKB 1
00000008 001C4 P.AAA: .LONG 8
00000000 001C8 .ADDRESS P.AAB

```

007C 8F BB 00000 WRITE_HEADERS::									
								PUSHR #^M<R2,R3,R4,R5,R6>	0856
								SUBL2 #4, SP	0902
								PUSHL #8	0903
04	AE	0000G	CF	5E	04	C2 00004		ADDL3 #27, HDR1, DESC+4	0908
			7E	24	08	DD 00007		MOVZWL 36(.CURRENT_VCB), -(SP)	0907
			7E	26	AB	C1 00009		MOVZWL 38(.CURRENT_VCB), -(SP)	0904
				08	AB	3C 00010		PUSHAB DESC	
					AE	3C 00014		CLRL -(SP)	
					7E	9F 00018		P.AAA	
					D4	0001B		CALLS #5, %SYS\$FAO	
					AF	9F 0001D		MOVL HDR1, R6	0912
			00000000G	9F	05	FB 00020		MOVCS #0, (SP), #48, #6, 54(R6)	
			56	0000G	CF	D0 00027			
			6E	00	2C	0002C			
					A6	00031			
					36				
			66	31524448	8F	DO 00033			
			0000G	32524448	8F	DO 0003A		MOVL #827475016, (R6)	0916
			DF	33524448	8F	DO 00043		MOVL #844252232, @HDR2	0917
			0000G	34524448	8F	DO 0004C		MOVL #861029448, @HDR3	0918
			7E	50	8F	9A 00055		MOVL #877806664, @HDR4	0919
					56	DD 00059		MOVZBL #80, -(SP)	0923
			0000G	CF	02	FB 0005B		PUSHL R6	
			7E	50	8F	9A 00060		CALLS #2, WRITE_BLOCK	
								MOVZBL #80, -(SP)	0924

0000G	CF	0000G	CF	DD	00064	PUSHL	HDR2	
		02	02	FB	00068	CALLS	#2, WRITE_BLOCK	0929
		2C	AB	95	0006D	TSTB	44(CURRENT_VCB)	
		02	26	19	00070	BLSS	1\$	
		48	AB	91	00072	CMPB	72(CURRENT_VCB), #2	
		7E	50	20	1B	00076	BLEQU	1\$
		0000G	BF	9A	00078	MOVZBL	#80, -(SP)	0932
0000G	CF	02	CF	DD	0007C	PUSHL	HDR3	
	03	48	02	FB	00080	CALLS	#2, WRITE_BLOCK	0933
		AB	91	00085	CMPB	72(CURRENT_VCB), #3		
		7E	OD	1B	00089	BLEQU	1\$	
		50	8F	9A	0008B	MOVZBL	#80, -(SP)	0934
		0000G	CF	DD	0008F	PUSHL	HDR4	
0000G	CF	02	FB	00093	CALLS	#2, WRITE_BLOCK		
	5E	08	CO	00098	1\$:	ADDL2	#8, SP	0937
		007C	8F	BA	00098	POPR	#^M<R2,R3,R4,R5,R6>	
				05	0009F	RSB		

; Routine Size: 160 bytes, Routine Base: \$CODE\$ + 01CC

; 559 0938 1

```
0939 1 ROUTINE INIT_NEW_FILE (INC_SEQ_NUM) : COMMON_CALL NOVALUE =
0940 1 ++
0941 1 FUNCTIONAL DESCRIPTION:
0942 1      this routine initializes the file identifier and sets status
0943 1      indicators.
0944 1 CALLING SEQUENCE:
0945 1      INIT_NEW_FILE(ARG1), called in kernel mode
0946 1 INPUT PARAMETERS:
0947 1      INC_SEQ_NUM - INDICATES IF THE CURRENT FILE NUMBER IN THE vcb
0948 1      should be incremented or not.
0949 1 IMPLICIT INPUTS:
0950 1      CURRENT_VCB - address of current volume control block
0951 1 OUTPUT PARAMETERS:
0952 1      none
0953 1 IMPLICIT OUTPUTS:
0954 1      current file id, starlet file indicator updated
0955 1 ROUTINE VALUE:
0956 1      none
0957 1 SIDE EFFECTS:
0958 1      none
0959 1 --
0960 1 BEGIN
0961 1 EXTERNAL REGISTER
0962 1      COMMON_REG;
0963 1      ! if end of volume set or dummy file, inc file number
0964 1      !
0965 1      IF .INC_SEQ_NUM
0966 1      OR
0967 1      (.CURRENT_VCB[VCBSB_CUR_RVN] EQ 1 AND .CURRENT_VCB[VCBSW_CUR_NUM] EQ 0)
0968 1      THEN
0969 1      CURRENT_VCB[VCBSW_CUR_NUM] = .CURRENT_VCB[VCBSW_CUR_NUM] + 1;
0970 1      CURRENT_VCB[VCBSW_CUR_SEQ] = 1;
0971 1      CURRENT_VCB[VCBSV_STARFILE] = 1;
0972 1      CURRENT_VCB[VCBSB_LBLCNT] = NO_OF_SUPPORT_ANSI_LABELS;
0973 1      ! set status indicators to show partial file
0974 1      CURRENT_VCB[VCBSV_PARTFILE] = 1;
0975 1      !
0976 1      ! end of routine
0977 1
0978 1
0979 1
0980 1
0981 1
0982 1
0983 1
0984 1
0985 1
0986 1
0987 1
0988 1
0989 1
0990 1
0991 1
0992 1
```

0000 00000 INIT_NEW_FILE:
08 01 04 2F AC E8 00002 .WORD Save nothing : 0939
01 08 12 00006 BLBS INC SEQ_NUM, 1\$: 0979
24 AB B5 0000C CMPB 47(CURRENT_VCB), #1 : 0981
03 12 0000F BNEQ 2\$:
24 AB B6 00011 1\$: INCW 36(CURRENT_VCB) : 0983
26 AB 01 B0 00014 2\$: MOVW #1, 38(CURRENT_VCB) : 0985
2D AB 01 88 00018 BISB2 #1, 45(CURRENT_VCB) : 0986
48 AB 04 90 0001C MOVB #4, 72(CURRENT_VCB) : 0987
08 AB 01 88 00020 BISB2 #1, 11(CURRENT_VCB) : 0991
08 AB 04 00024 RET : 0992

: Routine Size: 37 bytes, Routine Base: \$CODE\$ + 026C

: 615 0993 1

```

: 617 0994 1 ROUTINE UPD_PARTFILE (BIT_VALUE) : COMMON_CALL NOVALUE =
: 618 0995 1
: 619 0996 1 ++
: 620 0997 1
: 621 0998 1 | FUNCTIONAL DESCRIPTION:
: 622 0999 1 | This routine clears or sets the partial file flag in the VCB.
: 623 1000 1
: 624 1001 1 | CALLING SEQUENCE:
: 625 1002 1 | UPD_PARTFILE(ARG1), called in kernel mode
: 626 1003 1
: 627 1004 1 | INPUT PARAMETERS:
: 628 1005 1 | Value to which flag should be set to:
: 629 1006 1 | 0 - clear flag
: 630 1007 1 | 1 - set flag
: 631 1008 1
: 632 1009 1 | IMPLICIT INPUTS:
: 633 1010 1 | CURRENT_VCB
: 634 1011 1
: 635 1012 1 | OUTPUT PARAMETERS:
: 636 1013 1 | none
: 637 1014 1
: 638 1015 1 | IMPLICIT OUTPUTS:
: 639 1016 1 | PARTFILE flag in VCB is updated
: 640 1017 1
: 641 1018 1 | ROUTINE VALUE:
: 642 1019 1 | none
: 643 1020 1
: 644 1021 1 | SIDE EFFECTS:
: 645 1022 1 | none
: 646 1023 1
: 647 1024 1 | --
: 648 1025 1
: 649 1026 2 BEGIN
: 650 1027 2
: 651 1028 2 | EXTERNAL REGISTER
: 652 1029 2 | COMMON_REG;
: 653 1030 2
: 654 1031 2 | Update Partial file flag in the VCB
: 655 1032 2
: 656 1033 2 | CURRENT_VCB[VCB$V_PARTFILE] = .BIT_VALUE;
: 657 1034 2
: 658 1035 1 END: ! end of routine

```

0B	AB	01	00	04	AC	FO	00002	WORD	Save nothing	0994
							04	00009	BIT_VALUE, #0, #1, 11(CURRENT_VCB)	1033
								INSV		1035
								RET		

: Routine Size: 10 bytes, Routine Base: \$CODE\$ + 0291

: 659 1036 1
: 660 1037 1 END

CREATE
V04-000

C 6
16-Sep-1984 02:12:45
14-Sep-1984 12:46:37
VAX-11 Bliss-32 V4.0-742
[MTAACP.SRC]CREATE.B32:1

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: 661 1038 1
: 662 1039 0 ELUDOM

PSECT SUMMARY

Name	Bytes	Attributes
\$CODE\$	667	NOVEC,NOWRT, RD , EXE,NOSHR, LCL, REL, CON,NOPIC,ALIGN(2)

Library Statistics

File	----- Symbols -----			Pages Mapped	Processing Time
	Total	Loaded	Percent		
\$_\$255\$DUA28:[SYSLIB]LIB.L32:1	18619	50	0	1000	00:01.8

COMMAND QUALIFIERS

: BLISS/CHECK=(FIELD,INITIAL,OPTIMIZE)/LIS=LIS\$:\$CREATE/OBJ=OBJ\$:\$CREATE MSRC\$:\$CREATE/UPDATE=(ENH\$:\$CREATE)

: Size: 650 code + 17 data bytes
: Run Time: 00:16.3
: Elapsed Time: 00:54.4
: Lines/CPU Min: 3822
: Lexemes/CPU-Min: 19074
: Memory Used: 153 pages
: Compilation Complete

**F

0254 AH-BT13A-SE
VAX/VMS V4.0

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